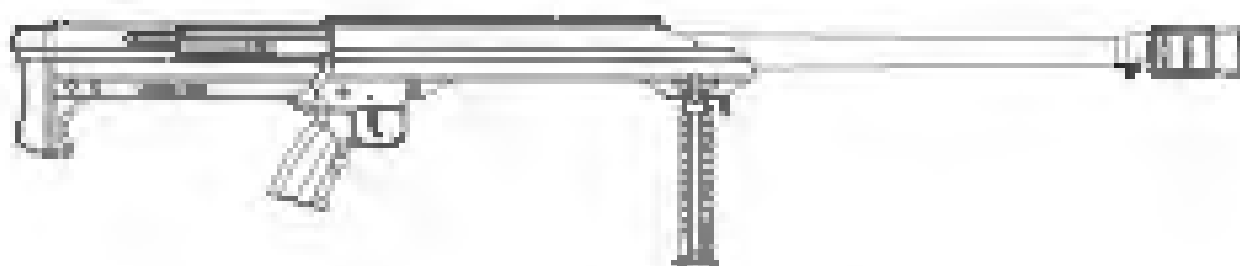




Model 99



Operator's Manual

October 13, 2006

USE OF THIS MANUAL

Before you handle the Model 38 rifle, read this manual in its entirety. It is important that you understand the principles of safe gun handling in general and the unique features of this rifle. This manual is not a substitute for training from a qualified instructor. Important safety topics are discussed in this chapter and throughout this manual. This manual should remain with the rifle and it should be transferred with the rifle to subsequent owners. It will be replaced at no cost by contacting the manufacturer.

This manual covers all variants of the Model 38. Technical specifications are subject to change without notice.

SAFETY GUIDELINES

WARNING

Failure to follow safety guidelines may cause injury or death.

Ammunition

Barrett does not endorse the use of handloaded, remanufactured, or surplus ammunition. The use of clean, dry and properly stored commercially manufactured ammunition will preserve your warranty.

Safety distance

The .416 Barrett and .50 BMG cartridges are identical in construction to an ordinary centerline rifle cartridge. Bullets fired from this rifle may travel as far as 5 miles. Always ensure that you have an adequate backstop.

Hearing protection

Hearing loss is permanent. Hearing loss from gunfire is cumulative, but the noise from even one shot may cause permanent loss. Wear both ear plugs and ear muffs. It is also your responsibility to protect the hearing of those around you. The muzzle brake is integral to the design of your rifle and works to divert a large portion of a shot's blast rearward and to the side of the muzzle. Your rifle must not be fired without it. People and objects should not be in the vicinity of the muzzle brake because its blast consists of high pressure, high temperature gas. All operators should wear double hearing protection. The safest place for a spectator is directly behind the shooter.

Eye protection

Eye protection should be worn when both shooting and maintaining your rifle. It is normal for firing to generate airborne dust and debris. Glasses also protect you from scopes during recoil. Protect your eyes from solvents and unsecured parts under spring pressure while performing maintenance on your rifle.

Assume every gun is loaded

Until you personally prove otherwise, treat every gun as if it were loaded. Do not trust your memory and do not take anyone else's word for it. Look and feel for an empty chamber. Do not trust the extractor to provide an empty chamber.

Beware of barrel obstructions

Ensure the barrel's bore is free of obstructions before you fire your rifle. Even the smallest obstruction such as a stuck patch or even grease will cause dangerously increased pressures that can rupture the barrel.

Use your muzzle brake

Your rifle was designed to be fired with the muzzle brake installed. Firing your rifle without the muzzle brake will subject your rifle and its accessories to damaging recoil. It could also cause the shooter to be injured.

Muzzle control

Always keep the muzzle pointed in a safe direction. Never allow your muzzle to point at anything that you do not intend to shoot.

Keep your finger off the trigger

Keep your finger off the trigger and out of the trigger guard until your sights are aligned on your target and you intend to fire.

Keep your safety on

Keep your safety on until your sights are aligned on your target and you intend to fire.

Identify your target and backstop

Before you pull the trigger, make certain of your target and what is beyond it. The rifle should never be fired at surfaces where bullets are likely to glance off in unpredictable directions.

Failure to fire

If your rifle fails to fire when you pull the trigger, do not tilt the bolt handle to open the action. Keep the rifle pointed toward a safe area and wait 2 minutes. If a hangfire (slow ignition) has occurred, the round will probably fire within two minutes. If the round does not fire, remove and inspect the cartridge. If the primer is indented properly, discard it in a safe manner. If the primer is lightly dented, refer to the troubleshooting chart in this manual.

Maintain your rifle properly

Performing proper maintenance, as outlined in this manual, insures that your rifle will be safe to shoot and will perform to design specification for many years. Alterations, modifications or adjustments may damage your rifle, make it unsafe to fire and will void warranty claims.

Store your rifle safely

Even though your rifle represents a significant financial investment, the greatest value in keeping it secured is preventing it from falling into the hands of a child, a careless adult, or a thief. It is your responsibility to take every reasonable precaution to secure your rifle.

Alcohol, medications and drugs

Do not handle or operate your rifle under the influence of alcohol, medication or drugs.

WARRANTY AND SERVICE

Barrett Firearms Manufacturing Inc. (BFMI) warrants that this firearm was manufactured free of defects in materials and workmanship. For one year from the date of purchase by the original owner, BFMI agrees to correct any defect in this firearm for the original purchaser by repair or replacement with the same or comparable model.

BFMI will not be responsible for injury, death, or damage to property resulting from either intentional or accidental discharge of this firearm or from its function when used for purposes or subjected to treatment for which it was not designed. BFMI will not honor claims involving this firearm which result from careless or improper handling, unauthorized adjustment or parts replacement, corrosion, neglect, the use of the wrong caliber ammunition, or the use of other than commercially manufactured ammunition in good condition, or any combination thereof. BFMI will not honor claims involving this firearm when such claims are made by the second or subsequent owner.

If you need factory service, whether made under warranty or not, please contact BFMI for instructions on how to have your gun repaired.

Barrett Firearms Manufacturing Inc.
P.O. Box 1077
Milledushow, TN 37133-1077
415-686-2936

www.barrettinc.com

Your Responsibility

Your Barrett rifle is well-engineered and manufactured to the highest standards. It was proof-tested and carefully inspected before it was packaged and shipped from our factory. Its safe use depends on you alone. You are the ultimate safety device. Much like other mechanical devices, such as electric power tools, gas-powered lawn equipment, and automobiles, your rifle is safe unless handled in an irresponsible or uneducated manner.

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SPECIFICATIONS

BARRETT MODEL 99

GAUGES	.418 Barrett or .60 BMG	
BARREL LENGTHS	OVERALL LENGTH	WEIGHT
32 inches heavy	50 inches	25 pounds
28 inches fluted	47 inches	23 pounds
25 inches fluted	43 inches	20 pounds
TWIST RATE	.418 Barrett 1 turn in 12 inches, right hand .60 BMG 1 turn in 15 inches, right hand	
SAFETY	Manual, thumb lever	
SAFETY RANGE NEEDED	3 miles	
SCOPE RAIL	Steel, anodized with base, M1913 eye, 13.75 inches long	
CARRYING CASE LENGTH	63 inches	
CARRYING CASE WIDTH	16 inches	
CARRYING CASE DEPTH	6 inches	
CARRYING CASE WEIGHT	24 pounds	
SCOPE AND RINGS WEIGHT	2.0 pounds (typical)	

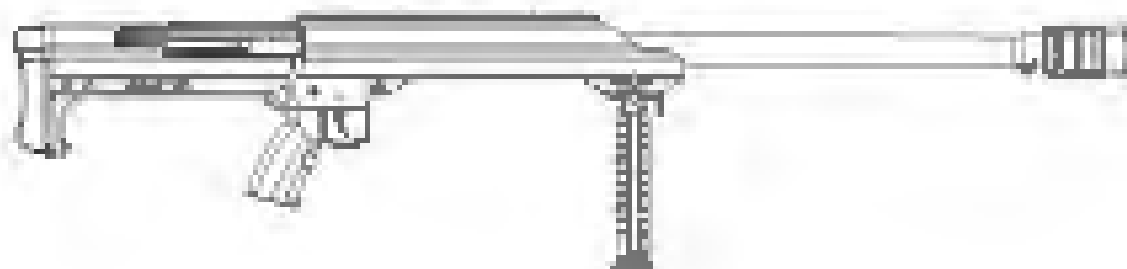


Figure 1. Model 99 with 32" heavy barrel

CONTENTS

Your Model 89 rifle includes the following:

- Rifle with bipod
- Watertight and airtight carrying case
- Operator's manual

Your rifle may have included a rifle scope and rings. It may have also included cleaning fluids and a cleaning kit.

The rifle is shipped from the factory fully assembled. (Figure 1.)

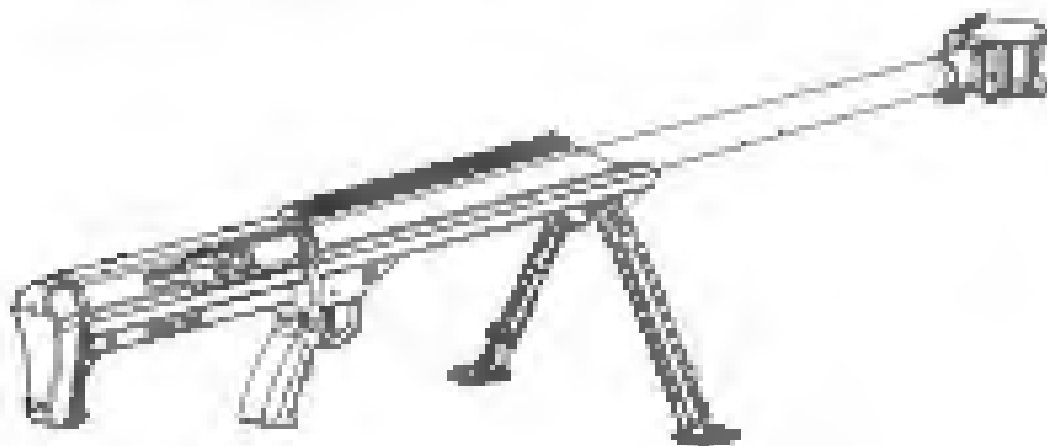


Figure 1. Fully assembled rifle.

FUNCTION

The Model 89 is a single-shot bolt action rifle. The shooter manually loads one single cartridge. The firing pin assembly is cocked when the bolt handle is raised. The bolt is retained in the receiver and is equipped with an extractor to remove a cartridge or shell casing. A manually controlled safety prevents or permits trigger movement.

BREAK-IN PROCEDURE

Because individual barrels, powder, primer and bullet combinations vary widely and because shooters have strongly held personal opinions on the subject, Barrett does not offer a specific procedure for barrel break-in. Barrett does recognize that a clean barrel shoots better. Barrett also recommends that you do not overheat your barrel, especially your new barrel. Experience has shown that the bore becomes less prone to fouling over time and that accuracy may increase as the barrel

LOADING

1. Rotate the safety lever to the "SAFE" (lever horizontal) position. (Figure 3.)

WARNING

Do not attempt to force a cartridge into the chamber by forcing the bolt closed. If the bolt will not close easily, remove the cartridge and examine it for damage or defects. Check the chamber for obstructions.

2. With the rifle pointed in a safe direction, lift the bolt handle and draw it to the rear (Figure 4, step A.). Insert a cartridge into the ejection port (Figure 4, step B.) Push the lock handle fully forward (Figure 4, step C.) and then downward (Figure 4, step D.).

WARNING

The shooter must be positioned directly behind the rifle with the recoil pad held firmly against the shoulder. Firing the rifle in any other position could result in injury by contact with the rifle or rifle scope.

WARNING

Do not fire the rifle unless all three assembly pins are secured in place. Severe injury will result by firing the rifle without these pins in place.

3. The rifle may now be fired by rotating the safety lever to the "FIRE" (lever vertical) position (Figure 5.) and then pulling the trigger.

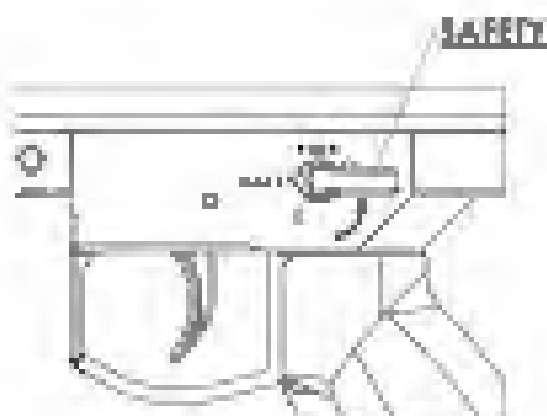
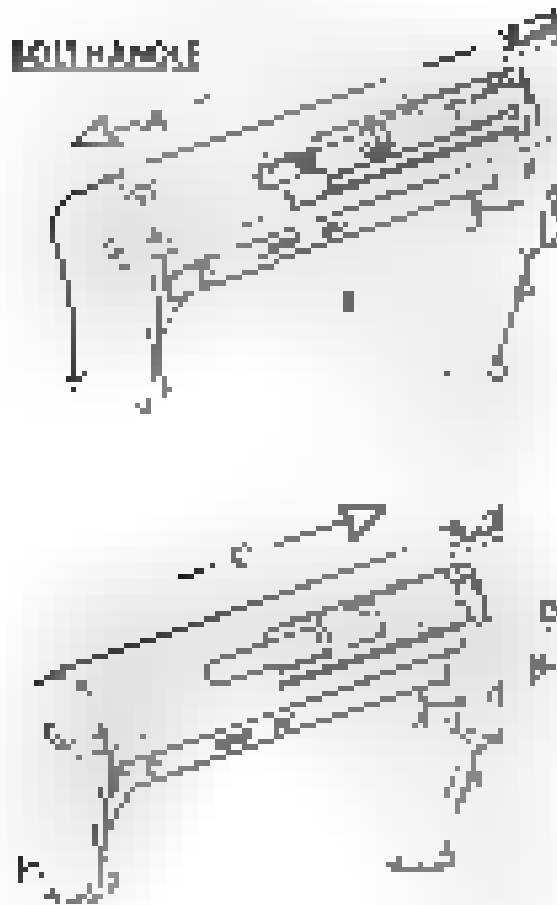


Figure 3. Safety lever to "SAFE"

WOLFFHARDT



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UNLOADING AND CLEARING

1. Place the safety lever in the **SAFE** position.
2. Lift the bolt handle upward and pull it to the rear to eject a chambered cartridge or spent shell casing.
 - With the bolt pulled fully to the rear, look into the chamber to make sure that the cartridge or shell casing has been removed. Insert a finger into chamber to verify the empty chamber.

DISASSEMBLY AND ASSEMBLY

WARNING

Unload and clear the rifle before disassembly. Forcing the disassembly of any will release stored energy. The carbide bullet has the potential to fly. Failure to use proper disassembly procedure could result in serious injury.

This rifle may be disassembled into 3 major components by removing 3 assembly pins and 1000 assembly pins (Figure 9).

Major components:

Receiver assembly (1)

Barrel assembly (2)

Trigger housing assembly (3)

Shot assembly (4)

Base assembly (5)

Assembly pins:

Assembly pins (6)

Base assembly pins (7)

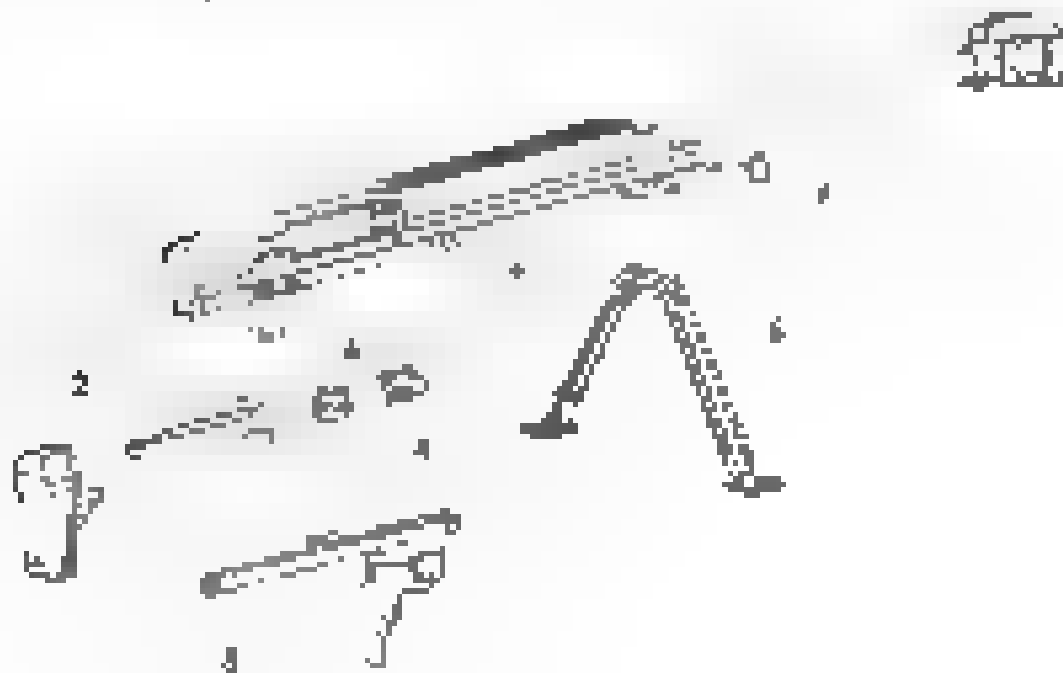


Figure 9 Major components.

Disassembly into major components

Always block safe when the rifle is in the closed lock and magazine assembly.

- Raise the bolt handle but do not rotate it from the locked position (Figure 7) and A. Remove the two rear assembly pins and the forward assembly pin (Figure 7) step B.



Figure 7

Remove the trigger housing assembly by pulling the pins and disassembling out of the receiver. (Figure 8).

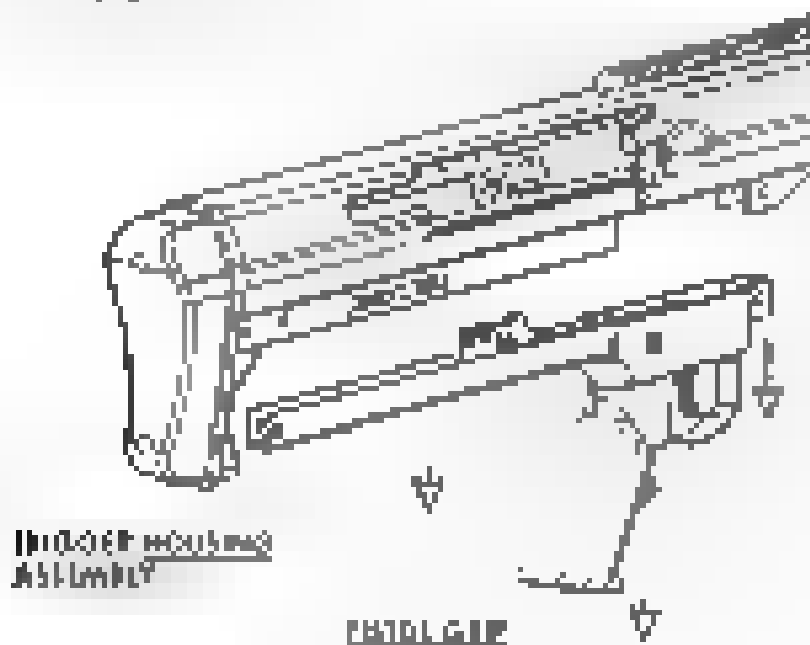


Figure 8

NOTE

No further disassembly of the trigger housing assembly is recommended as necessary for maintenance.

NOTE

The firing pin assembly is moved by using the tool handle. Disassembly is initiated by removing the bolt assembly with the firing pin assembly cocked. The firing pin assembly can be externally unlocked by pulling the bolt handle assembly as if it is being removed. If this occurs the firing pin assembly may be removed while the bolt assembly remains in the receiver assembly. Careful the loading piece aligned with the end of the cylinder assembly and hold the bolt handle assembly cocked at 180° or turn to unlock the firing pin assembly. (See figure 3, parts 2 and 4.)

4. Turn the firing pin the bolt handle assembly remains to remove it from the receiver assembly.
5. Grasp the bolt handle and withdraw it from the barrel. Extract the bolt so that the locking lugs will pass through the cartridge lock and ejection port. Remove the bolt from the receiver.
6. Lift the front of the receiver to remove the gun's weight from the bipod legs. Pull the D-000 assembly out forward and remove D-000.

Reassembly of major components

Major components are assembled in reverse order of disassembly.

Removal of firing pin assembly from bolt assembly

NOTE

The firing pin assembly may be cocked to engage assembly pin insertion into the cocking piece shroud. The firing pin assembly is cocked when the cocking piece is outside of the cam slot. (See Figure 9.)

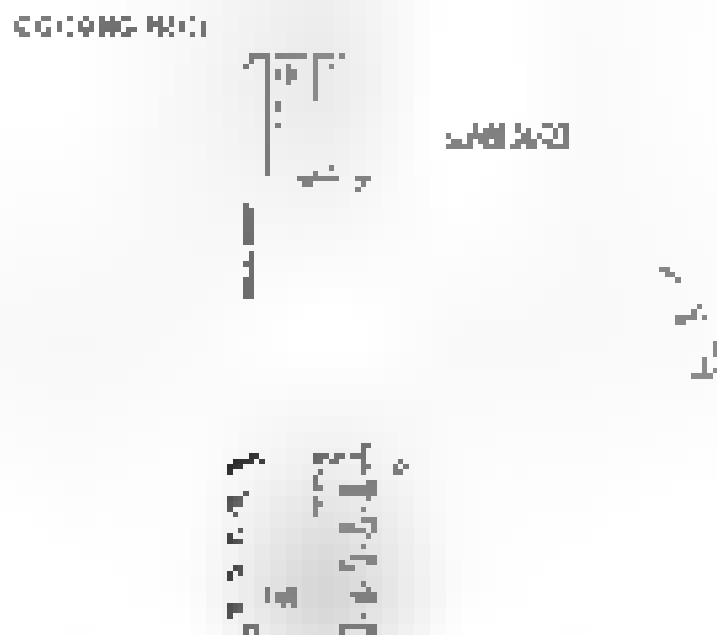


Figure 9. Cocked firing pin assembly.

Insert the cocking pin into the slot in the cocking piece shroud. The assembly pin may require rotation and tilting as the pin is inserted. (Figure 10) See A. The lock together the cocking piece shroud and the firing pin assembly.

WARNING

Do not remove the assembly pin when the cocking piece shroud is in the firing pin assembly is removed from the bolt. The firing pin spring is under tension. Serious injury can occur if the assembly pin is released.

- **4** Using the dog handle, turn the locking piece around 90 degrees to remove it from the bolt assembly. (Figure 10, step 4)



Figure 10

- 5** Separate the firing pin assembly from the bolt assembly. (Figure 11)

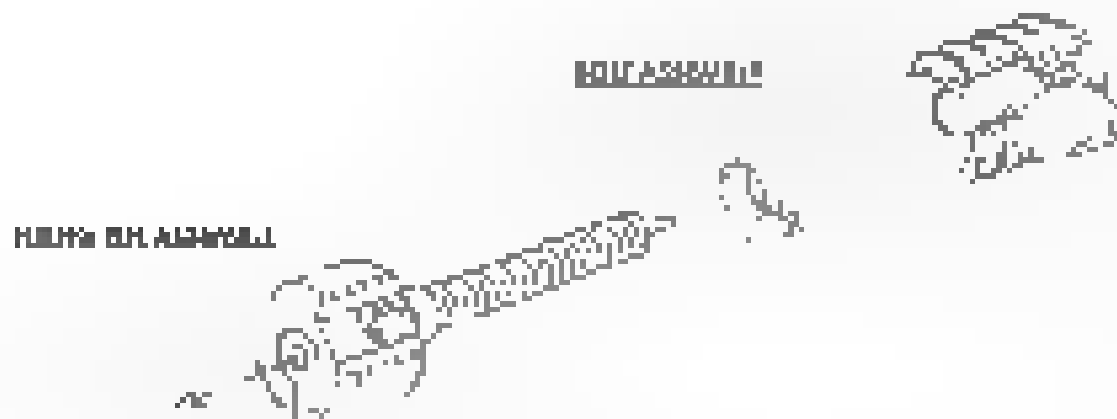


Figure 11

NOTE

No further disassembly of the firing pin assembly is recommended as necessary for maintenance.

Installation of Firing pin assembly into bolt assembly

Installation of the firing pin assembly into the bolt assembly is in the reverse order of its removal.

Removal and replacement of ejector and extractor

WARNING

The ejector is under spring pressure and is held in place by the ejector pin. Wear safety glasses when removing the ejector pin.

NOTE

Removal and replacement of the ejector pin requires the use of a hammer and a 3/32 inch punch. It is also advised to follow the steps below.

NOTE

The extractor, ejector and their springs are not duty to fail. If the die fails to extract or eject, rule out other causes before attempting this procedure. It is not necessary to remove either the ejector or the extractor for routine maintenance. Their removal is to facilitate parts replacement only. If you are not confident in your ability, please seek a competent person to perform this service for a replacement.

EJECTOR REMOVAL

1. Hold the bolt face firmly against a flat work surface. Drive the ejector pin out of the bolt with a 3/32 inch punch (Figure 12-440 A). The ejector and ejector spring will escape from the bolt after the punch is removed from the ejector pin hole.

2. Lift the bolt from the work surface and remove the ejector and ejector spring (Figure 12-440 B).

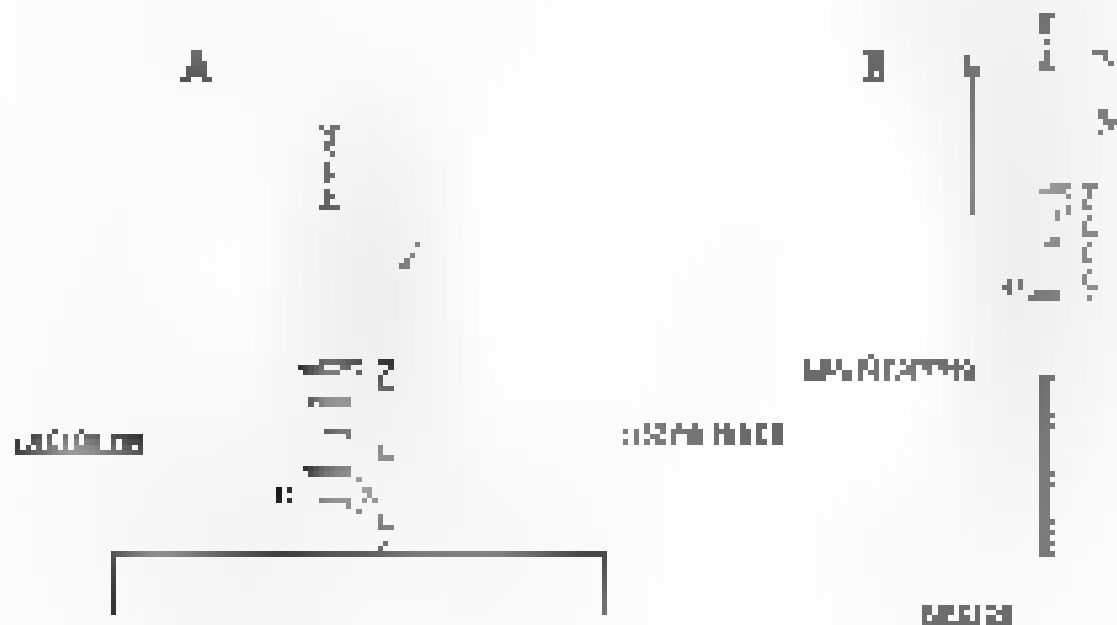


Figure 12

Extractor removal

1 Using a 3/32 or smaller punch gently lift the end of the extractor spring away from the shoulder in the spring not enough for it to clear the shoulder (Figure 13).



Figure 13

2 Slide the extractor spring forward over the extractor until it is clear of the bolt shoulder. Remove the spring (Figure 14). Note that the end of the extractor spring is bent slightly toward the extractor.



Figure 14

3 Lift the extractor out of its recess in the bolt. (Figure 15).



Figure 15

Extractor Installation

The installation of the extractor is in reverse order of its removal.

Extractor Installation

1. Place the extractor spring in the extractor spring hole (Figure 16, step A). The spring is O-RINGED.
- Push the extractor into the engine hole (Figure 16, step B). Orient the extractor so that the extractor's pin slot is facing toward the ball.

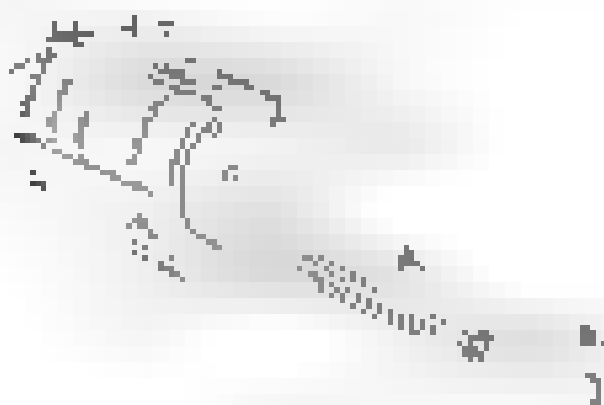


Figure 16

Slide the pin of a shell casing under the extractor. Use the compress force of the shell casing to force the extractor flush with the body base (Figure 17).

Slide G.L.A.M.



Figure 17

4. Opening through the center ejector pin hole, position the die cavity pin so it is oriented so that the ejector pin hole is clear. While depressing the ejector with a cartridge case, push a punch through one side of the ejector pin hole leaving room for the ejector pin to be pushed from the opposite side. (Figure 18 Step 4) The punch holds the ejector in place until the ejector pin has been pushed from the opposite side. (Figure 18 Step 5) With a 3/32 punch push down driving the ejector pin until it is flush with the ball's ejector pin recess.



Figure 18

CLEANING AND LUBRICATION

WARNING

Unload and clear the rifle before cleaning.

CAUTION

Do not insert cleaning rods through the muzzle. The barrel crown could be damaged and it would seriously reduce the accuracy of the rifle.

NOTES

To protect the rifle from corrosion, the rifle and the interior of the carrying case should be thoroughly dried before the rifle is placed in the carrying case for storage.

Cleaning procedure

1. The rifle should be cleaned and lubricated after each shooting session. Regular cleaning prevents the corrosion caused by moisture.

Apply cleaning solvent to a chamber brush and clean the chamber. Borelith™ Bore Cleaner is recommended.

Apply cleaning solvent to a bore brush and clean the bore. Borelith™ Bore Cleaner is recommended.

4. Clean the muzzle brake with a soft bristle brush and bore solvent. It is best to clean the muzzle brake at the same time the barrel is being cleaned as the bore solvent will help loosen the bristles by sliding on the rifling walls.

5. Clean the magazine with bore solvent. Use a soft bristle brush to remove carbon from both the extractor and the mags. Eject the spent and extractor by hand to help clear the magazine fully.

6. Use dry bristles as necessary to remove oil from the bore and chamber.

Clean the remainder of the rifle with compressed air. Remove outside brushes and rags. Make sure all surfaces are clean and free of moisture.

Corrosive ammunition clearing procedure

CAUTION

Never shoot nor recommend shooting corrosive ammunition. Shooting corrosive ammunition may damage your firearm. Damage due to firing corrosive ammunition is easily repaired and is not covered under the warranty program.

CAUTION

Run will begin to turn on bare metal rotating when you are away from unless rust preventative or light oil is applied immediately.

If you have been forced by necessity or have accidentally fired corrosive ammunition, the following steps are clearing procedure apply.

Clearing. Immediately after firing the corrosive ammunition, thoroughly scrub the bore and bolt face with very hot soapy water or cleaner specifically designed for corrosive ammunition.

1. Flushing and drying. When the metal is clean, scrub the surfaces with very hot water. Wipe off excess moisture. The residual heat in the metal will evaporate small water droplets.

2. Protecting. Either continue clearing the rifle using procedures specified for non-corrosive ammunition, or if temporary immersion or storage is necessary, immediately coat the surface with rust preventative.

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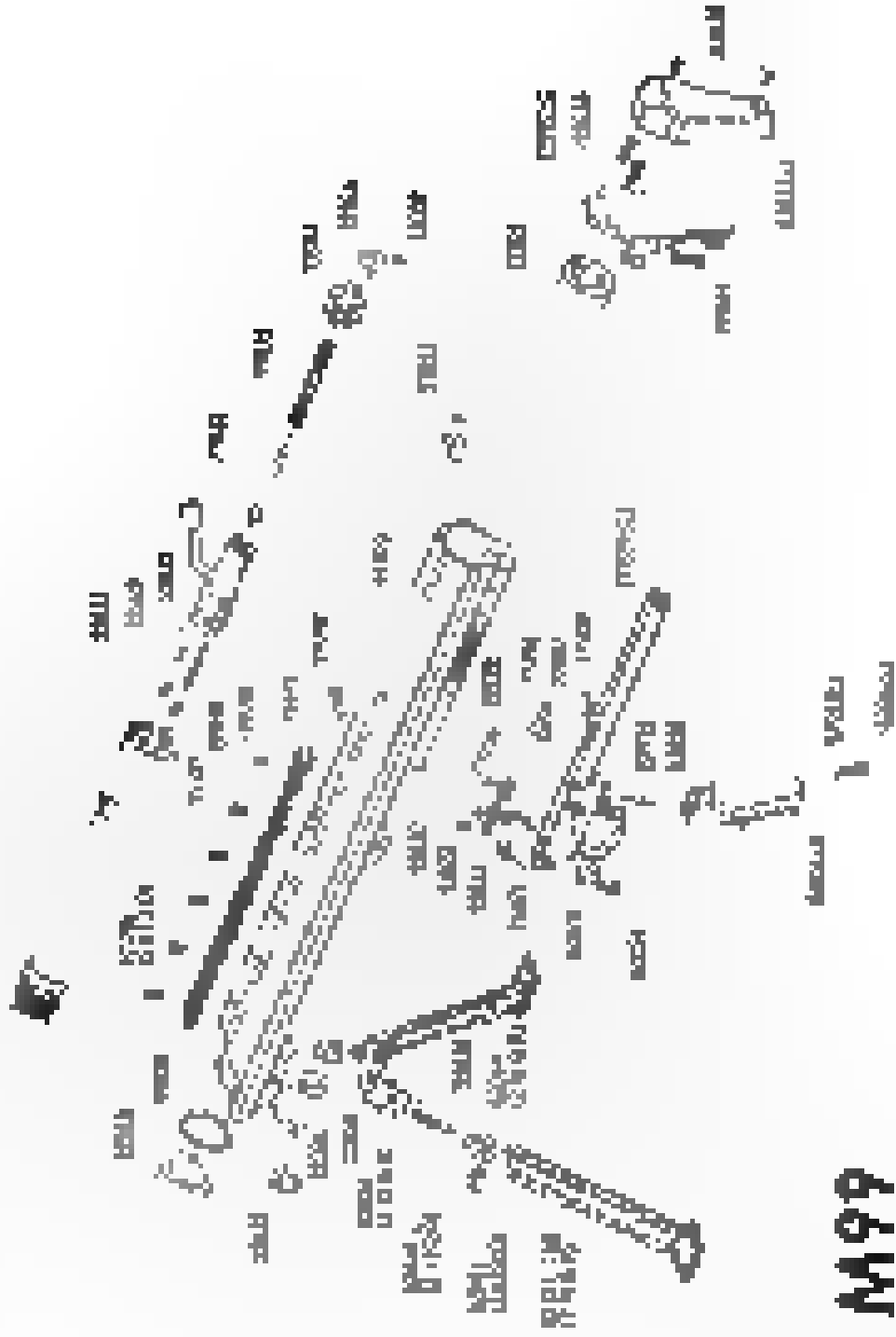
TROUBLESHOOTING

SYMPTOM	CAUSE	CORRECTIVE ACTION
Failure to chamber and lock	Damaged cartridge	Remove and replace cartridge
	1. Dirty or damaged chamber	1. Clean chamber
2. Failure to drop	Faulty gun/weapon (Pressure cylinder in center of cartridge drops to lock)	Replace gun/weapon
	3. Cocking lever stuck and properly adjusted to lock	3. Reassemble correctly
	5. Cocking lever is slipping	Clean and lubricate cocking lever
	6. Spring gun or firing pin spring broken or damaged	4. Replace complete ball as handle for repair
	9. Ball handle not down fully	5. Ensure ball handle is down fully
4. Failure to extract	Broken or worn extractor	Replace extractor
	7. Broken or worn extractor spring	Replace extractor spring
	4. Extractor not moving freely	4. Clean extractor, extractor spring and recoil
	4. Dirty extraction or chamber	• Clean chamber and extract extraction of case
	5. Broken case pin	6. Clean and polish rod
4. Failure to eject	Broken or worn ejector	Replace ejector
	2. Broken or worn ejector spring	• Replace ejector spring
	4. Ejector not moving freely	4. Clean ejector, ejector spring and recoil
5. Very hard recoil	Faulty or bad ammunition	Replace ammunition, cool if hot
	2. Muzzle brake vibrating	• Consult with Barrell for instructions
	3. Improper shooter position	Properly shoulder the barrell



Trigger
Magazine

Location of trigger
Location of magazine



RIFLE M99

RIFLEMAN



Model 99-1 Parts List

Quantity quantities required for part numbers preceded by "M"

PART NO.	DESCRIPTION	QTY.
2001-1	TRUCK PIN	1
2002	TRUCK SPRING	2
2003-1	TRUCK PIN	1
2004	TRUCK SPRING	2
2005-1	TRUCK SPRING	1
2006	TRUCK SPRING	2
2007-1	TRUCK SPRING	1
2008	TRUCK SPRING	2
2009-1	TRUCK SPRING	1
2010	TRUCK SPRING	2
2011-1	TRUCK SPRING	1
2012	TRUCK SPRING	2
2013-1	TRUCK SPRING	1
2014	TRUCK SPRING	2
2015-1	TRUCK SPRING	1
2016	TRUCK SPRING	2
2017-1	TRUCK SPRING	1
2018	TRUCK SPRING	2
2019-1	TRUCK SPRING	1
2020	TRUCK SPRING	2
2021-1	TRUCK SPRING	1
2022	TRUCK SPRING	2
2023-1	TRUCK SPRING	1
2024	TRUCK SPRING	2
2025-1	TRUCK SPRING	1
2026	TRUCK SPRING	2

PART NO.	DESCRIPTION	QTY.
2027	TRUCK SPRING	1
2028	TRUCK SPRING	2
2029-1	TRUCK SPRING	1
2030	TRUCK SPRING	2
2031-1	TRUCK SPRING	1
2032	TRUCK SPRING	2
2033-1	TRUCK SPRING	1
2034	TRUCK SPRING	2
2035-1	TRUCK SPRING	1
2036	TRUCK SPRING	2
2037-1	TRUCK SPRING	1
2038	TRUCK SPRING	2
2039-1	TRUCK SPRING	1
2040	TRUCK SPRING	2
2041-1	TRUCK SPRING	1
2042	TRUCK SPRING	2
2043-1	TRUCK SPRING	1
2044	TRUCK SPRING	2
2045-1	TRUCK SPRING	1
2046	TRUCK SPRING	2
2047-1	TRUCK SPRING	1
2048	TRUCK SPRING	2
2049-1	TRUCK SPRING	1
2050	TRUCK SPRING	2

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